



**Missouri Department of Natural Resources**  
**Air Pollution Control Program**

## PERMIT TO OPERATE

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to operate the air contaminant source(s) described below, in accordance with the laws, rules, and conditions set forth here in.

**Operating Permit Number:** OP2006-037  
**Expiration Date:** JUL 9 2011  
**Installation ID:** 121-0004  
**Project Number:** 2002-11-179

**Installation Name and Address**

Macon Municipal Power Plant  
326 Vine Street  
Macon, MO 63552  
Macon County

**Parent Company's Name and Address**

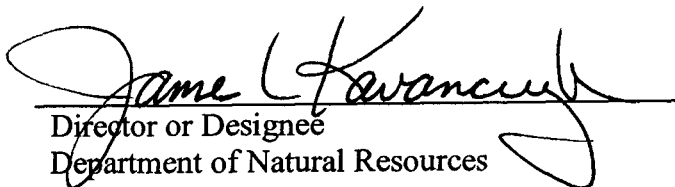
Macon Municipal Utilities  
121 W. Brouke Street  
Macon, MO 63552

**Installation Description:**

The Macon Municipal Utilities (MMU) consists of four facilities: Macon Municipal Power Plant, MMU – NEMO Generating Station, MMU Substation No. 2 (S-2) and MMU Substation No. 3 (S-3). These four facilities, which are located within a few miles of each other, are used primarily for electricity generation during peak demand or during emergencies and supply electricity to the Missouri Public Utility Alliance Power Pool. The four facilities have been deemed to be under common control and are being considered as one facility under this Title V Permit.

JUL 10 2006

Effective Date

  
Director or Designee  
Department of Natural Resources

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## I. Installation Description and Equipment Listing

### INSTALLATION DESCRIPTION

The Macon Municipal Utilities (MMU) consists of four facilities: Macon Municipal Power Plant, MMU – NEMO Generating Station, MMU Substation No. 2 (S-2) and MMU Substation No. 3 (S-3). These four facilities, which are located within a few miles of each other, are used primarily for electricity generation during peak demand or during emergencies and supply electricity to the Missouri Public Utility Alliance Power Pool.

The four facilities have been deemed to be under common control and are being considered as one facility under this Title V Permit. The Macon Municipal Power Plant consists of three (3) dual fuel diesel engines generators, two (2) 10,000 gallon diesel oil fuel storage tanks, one (1) fuel oil day tank and one (1) lube oil storage tank. The MMU – NEMO Generating Station consists of a ten- (10) megawatts (MW) combined cycle gas turbine that fires only natural gas. MMU S-2 consists of two (2) 1875 kilowatt (KW) diesel engine generators and MMU S-3 consists of four (4) 1875 kilowatt (KW) diesel engine generators.

Reported Air Pollutant Emissions, tons per year							
Year	Particulate Matter ≤ Ten Microns (PM-10)	Sulfur Oxides (SO <sub>x</sub> )	Nitrogen Oxides (NO <sub>x</sub> )	Volatile Organic Compounds (VOC)	Carbon Monoxide (CO)	Lead (Pb)	Hazardous Air Pollutants (HAPs)
1997	0.57	0.53	10.96	0.77	2.13	-	-
1998	0.79	0.73	13.41	1.00	2.72	-	-
1999	1.06	0.99	17.57	1.33	3.59	-	-
2000	1.62	1.47	33.66	2.29	6.40	-	-
2001	0.33	0.31	4.66	0.38	1.00	-	-
2002	0.02	0.02	0.32	0.02	0.07	-	-
2003	0.48	0.45	6.87	0.57	1.48	-	-
2004	0.04	0.04	0.61	0.05	0.13	-	-

### EMISSION UNITS WITH LIMITATIONS

The following list provides a description of the equipment at this installation which emit air pollutants and which are identified as having unit-specific emission limitations.

<u>Emission Unit #</u>	<u>Description of Emission Unit</u>
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#### Emission Units at the Macon Municipal Power Plant – City of Macon

EU0010	55 MMBTU/hour Nordberg CI Dual Fuel – Diesel Engine Generator (EP-02)
EU0020	55 MMBTU/hour Worthington CI Dual Fuel – Diesel Engine Generator (EP-03)
EU0030	800 kW Caterpillar Diesel Engine Generator (EP-04)

#### Emission Units at the MMU – NEMO Generating Station

EU0040	10 MW Solar Mars Model Natural Gas Fired Combustion Turbine (EP-01)
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#### Emission Units at the MMU – Substation No. 3

EU0050	1875 kW Caterpillar Diesel Engine Generator (EP-11)
EU0060	1875 kW Caterpillar Diesel Engine Generator (EP-12)
EU0070	1875 kW Caterpillar Diesel Engine Generator (EP-13)
EU0080	1875 kW Caterpillar Diesel Engine Generator (EP-14)

#### Emission Units at the MMU – Substation No. 2

EU0090	1875 kW Caterpillar Diesel Engine Generator (EP-15)
EU0100	1875 kW Caterpillar Diesel Engine Generator (EP-16)

### **EMISSION UNITS WITHOUT LIMITATIONS**

The following list provides a description of the equipment that does not have unit specific limitations at the time of permit issuance.

#### **Description of Emission Source**

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#### **Macon Municipal Power Plant – City of Macon**

10,000 Gallon Diesel Fuel Storage Tank, installed in 1968 (EP-05)  
10,000 Gallon Diesel Fuel Storage Tank, installed in 1968 (EP-06)  
0.35 MMBTU/hour Burnham Natural Gas Boiler, Model E-50, installed in 1987  
Two (2) 0.1 MMBTU/hour Sterling Natural Gas Space Heaters  
630 gallon Diesel Fuel Storage Tank (Day Tank), installed in 1968 (EP-10)  
6,000 Gallon 50 Weight Lube Oil Storage Tank, installed in 1968

### **DOCUMENTS INCORPORATED BY REFERENCE**

These documents have been incorporated by reference into this permit.

Construction Permit No. 0289-014A, issued on February 24, 1989 to Macon Municipal Power Plant.  
Construction Permit No. 072002-004, issued on June 11, 2002 to MMU – NEMO Generating Station.  
Construction Permit No. 022003-012, issued on January 31, 2003 to MMU Substation No. 3.  
Construction Permit No. 092003-016, issued on September 23, 2003 to MMU Substation No. 2.

## **II. Plant Wide Emission Limitations**

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements.

### **Permit Condition PW001**

10 CSR 10-6.170

#### **Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin**

##### **Emission Limitation:**

The permittee shall not cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line or origin. The nature or origin of the particulate matter shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the director;

The permittee shall not cause nor allow to occur any fugitive particulate matter emissions to remain visible in the ambient air beyond the property line of origin.

Should it be determined that noncompliance has occurred, the director may require reasonable control measures as may be necessary.

##### **Monitoring:**

The permittee shall conduct inspections of its facilities sufficient to determine compliance with this regulation. At a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind and the presence of uncombined water. If a violation of this regulation is discovered, the source shall undertake corrective action to eliminate the violation.

The following monitoring schedule must be maintained:

Weekly observations shall be conducted for a minimum of eight consecutive weeks after permit issuance. Should no violation of this regulation be observed during this period then-

Observations must be made once every two weeks for a period of eight weeks. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period then-

Observations must be made once per month. If a violation is noted, monitoring reverts to weekly.

If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner to the initial monitoring frequency.

##### **Recordkeeping:**

A log must be maintained noting the following:

Whether air emissions (except water vapor) remain visible in the ambient air beyond the property line of origin.  
Whether the visible emissions were normal for the installation.

Equipment malfunctions that could cause an exceedance of 10 CSR 10-6.170.

Any violations of 10 CSR 10-6.170 and any corrective actions undertaken to correct the violation.

Attachment A contains a log including these Recordkeeping requirements. This log, or an equivalent created by the permittee, must be used to certify compliance with this requirement.

**Reporting:**

The permittee shall report to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could cause an exceedance of this regulation.

### III. Emission Unit Specific Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements.

EU0010 through EU0030 Macon Municipal Power Plant – Diesel Engine Generators			
EU ID	EIQ Reference # (Year)	General Description	Manufacturer/Model #
EU0010	EP-02 (2002)	Diesel Engine Generator (55MMBTU/hour rated heat input) that can fire natural gas or diesel fuel. Installed in 1968.	Nordberg, Model No. TSGL-211OSC
EU0020	EP-03 (2002)	Diesel Engine Generator (55 MMBTU/hour rated heat input) that can fire natural gas or diesel fuel. Installed in 1971	Worthington, Model No. SWCGO-VEE
EU0030	EP-04 (2002)	800 kW Diesel Engine Generator (15 MMBTU/hour rated heat input) that fires only diesel fuel. Installed in 1989.	Caterpillar, Model No. 3512 TA

#### Permit Condition EU0010-001 through EU0030-001

10 CSR 10-6.260

#### Restriction of Emission of Sulfur Compounds

##### Emission Limitation

Emissions from EU0010 (Nordberg Engine) shall not contain more than 2000 parts per million by volume (ppmv) of sulfur dioxide or more that 70 milligrams per cubic meter ( $\text{mg}/\text{m}^3$ ) of sulfuric acid or sulfur trioxide or any combination of those gases averaged on any consecutive three hour time period.

Emissions from each of the units EU0020 (Worthington Engine) and EU0030 (Caterpillar Engine) shall not contain more than 500 parts per million by volume (ppmv) of sulfur dioxide or more that 35 milligrams per cubic meter ( $\text{mg}/\text{m}^3$ ) of sulfuric acid or sulfur trioxide or any combination of those gases averaged on any consecutive three hour time period.

No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards. [10 CSR 10-6.260(4)<sup>1</sup> & 10 CSR 10-6.010 Ambient Air Quality Standards]

<sup>1</sup> 10 CSR10-6.260(4) is a state-only requirement

Pollutant	Concentration by Volume	Remarks
Sulfur Dioxide (SO <sub>2</sub> )	0.03 parts per million (ppm)	Annual arithmetic mean
	0.14 ppm (365 micrograms per cubic meter (µg/m <sup>3</sup> ))	24-hour average not to be exceeded more than once per year
	0.5 ppm (1300 µg/m <sup>3</sup> )	three-hour average not to be exceeded more than once per year
Hydrogen Sulfide (H <sub>2</sub> S)	0.05 ppm (70 µg/m <sup>3</sup> )	½-hour average not to be exceeded over two times per year
	0.03 ppm (42 µg/m <sup>3</sup> )	½-hour average not to be exceeded over two times in any five consecutive days
Sulfuric Acid (H <sub>2</sub> SO <sub>4</sub> )	10 µg/m <sup>3</sup>	24-hour average not to be exceeded more than once in any ninety consecutive days
	30 µg/m <sup>3</sup>	One-hour average not to be exceeded more than once in any two consecutive days

The emission units shall be limited to burning fuel oil with a sulfur content of no more 0.5 percent sulfur by weight. This will ensure compliance with the emission limitation without the need for conducting compliance testing. The fuel oils known to be less than 0.5 percent by weight sulfur per Chapter 414 RSMo, section 414.032, ASTM D396-Table 1 and ASTM D975-Table 1, are fuel oil No. 1 and No. 2 and diesel fuel oil Grade Low Sulfur No. 1-D, Grade Low Sulfur No. 2-D. However, these units are not limited to the known fuel oils listed above, but are limited to fuel oils based solely on having a percent sulfur by weight content of 0.5 percent or less.

**Monitoring:**

The permittee shall monitor the percent of sulfur in the fuel oil. The sulfur content can be vendor supplied or installation generated.

**Recordkeeping:**

The installation shall maintain records of the fuel type used for verifying the sulfur content in the fuel. Purchase receipts, analyzed samples or certifications that verify the fuel type as a grade level with a sulfur content less than 0.5 percent by weight will be acceptable. If this can not be accomplished then compliance to the emission limitations shall be determined by source testing and shall be accomplished as specified in 10 CSR 10-6.030(6) for sulfur dioxide emissions and 10 CSR 10-6.040 for measuring ambient sulfur compound concentrations. Other methods approved by the staff director in advance may be used.

**Reporting:**

The permittee shall report any change of fuel type to the Air Pollution Control Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 within ten days of the switch of fuel types.

The permittee shall report to the Air Pollution Control Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which causes an exceedance of this regulation.



**Permit Condition EU0030-002**

10 CSR 10-6.060

**Construction Permits Required – Permit No. 0289-014A, Issued on February 24, 1989**

**Emission Limitation**

The permittee shall ensure that the EU0030 (Caterpillar Engine) shall not operate for more than 2,790 hours on a 12-month rolling average basis.

The permittee shall not emit pollutants greater than the levels established in 10 CSR 10-6.060 (7)(A), Table 1, *De Minimis* Emission Levels.

**Monitoring:**

None

**Recordkeeping:**

The permittee shall keep a running total of the hours of operation of EU0030 (Caterpillar Engine) in an annual log.

**Reporting:**

The permittee shall report to the Air Pollution Control Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this permit condition, or any malfunction which causes an exceedance of this permit condition.

**EU0040**

**MMU – NEMO Generating Station – Combined Cycle Gas Turbine**

<b>EU ID</b>	<b>EIQ Reference # (Year)</b>	<b>General Description</b>	<b>Manufacturer/Model #</b>
EU0040	EP-01	10 MW combustion turbine firing natural gas only and operating in combined cycle mode. The heat recovery steam generator does not have duct firing.	Solar, Mars Model 100 (T-15000) S Unit

**Permit Condition EU0040-001**

10 CSR 10-6.060

**Construction Permits Required – Permit No. 072002-004, Issued on June 11, 2002**

**Emission Limitation:**

The permittee shall emit less than forty (40) tons of nitrogen oxides NO<sub>x</sub> in any consecutive 12-month period from the combustion turbine and the heat recovery steam generator.

If the NO<sub>x</sub> emissions from the Combustion Turbine and Heat Recovery Steam Generator exceed the 40 ton per year emission limitation, then the permittee will be required to be re-evaluate the combustion turbine under the Prevention of Significant Deterioration review under 10 CSR 10-6.060 (8).

The permittee shall not discharge into the atmosphere from the combustion turbine any gases which contain NO<sub>x</sub> in excess of 0.011 percent by volume (11 ppmvd) at 15 percent O<sub>2</sub> and on a dry basis.

The permittee shall not discharge into the atmosphere from the combustion turbine any gases which contain SO<sub>x</sub> in excess of 0.015 percent by volume (15 ppmvd) at 15 percent O<sub>2</sub> and on a dry basis.

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**Operational Limitation:**

No fuels other than natural gas shall be combusted in the Combustion Turbine and Heat Recovery Steam Generator at any time at this site.

The permittee shall not operate this turbine at loads less than fifty percent (50%) unless the turbine is in startup or shutdown mode.

**Monitoring and Compliance Testing:**

At least once every year, after commencement of operation, the permittee shall obtain from the fuel vendors or conduct their own fuel analysis to evaluate the typical sulfur content weight percent for natural gas.

Stack tests shall be performed for CO and NO<sub>x</sub> on the Combustion Turbine and Heat Recovery Steam Generator at the installation in order to develop the emission factor(s) used to demonstrate compliance with the NO<sub>x</sub> limit and verify CO emissions from the Combustion Turbine and Heat Recovery Steam Generator. The emission tests should provide emission factors for CO and NO<sub>x</sub> for a full range of loads on the turbines (i.e. at loads from 50% to 100%) so that an accurate estimate of CO and NO<sub>x</sub> emissions from the installation during all modes of operation can be determined. The installation shall conduct tests that represent, at a minimum, three (3) different operational scenarios for each pollutant.

The emission tests required by this permit for the turbines shall be conducted in accordance with the following methods and procedures.

The test methods and procedures outlined in 40 CFR §60.335, *Test methods and procedures*, shall be adhered to by the applicant in testing for NO<sub>x</sub> from the combustion turbines. EPA Method 20 or other method approved by the Director shall be used to determine the NO<sub>x</sub> emission rate.

The test methods and procedures outlined in 40 CFR Part 60, Appendix A, Method 10 or other method approved by the Director, shall be adhered to by the applicant in testing for CO.

The stack tests required by this permit shall be performed within 60 days after achieving the maximum production rate at which the turbines will be operated, but not later than 180 days after initial start-up for commercial operation of the turbines and shall be conducted in accordance with the Stack Test Procedures outlined above.

The date on which performance tests are conducted must be pre-arranged with the Air Pollution Control Program a minimum of 30-days prior to the proposed test date. The Program may arrange a pretest meeting, if necessary. A completed Proposed Test Plan form may serve the purpose of notification and must be approved by the Air Pollution Control Program prior to conducting the required emission testing.

**Recordkeeping:**

The permittee shall keep monthly records that are adequate to determine the NO<sub>x</sub> emissions from the Combustion Turbine and Heat Recovery Steam Generator. These records shall also indicate the total quantity of NO<sub>x</sub> emissions from the installation over the previous 12-month period. The records will utilize an emission factor developed during NO<sub>x</sub> compliance testing from at least three (3) different representative operating scenarios. Attachment B, *NO<sub>x</sub> Compliance Worksheet*, or an equivalent form of the company's own design, is suitable for this purpose. The most recent 60 months of records shall be maintained on-site and shall be made immediately available to Missouri Department of Natural Resources personnel upon request.

The fuel consumption records and statement shall be kept on-site for five (5) years and shall be made immediately available to the Missouri Department of Natural Resources' personnel upon request.

**Reporting:**

Two (2) copies of a written report of the performance test results shall be submitted to the Director of the Air Pollution Control Program within 30 days of completion of any required testing. The report must include legible copies of the raw data sheets, analytical instrument laboratory data, and complete sample calculations from the required EPA Method for at least one (1) sample run.

The test report is to fully account for all operational and emission parameters addressed by these permit conditions as well as in Subpart GG of the NSPS.

The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, Missouri 65102, no later than ten (10) days after the end of the month, in which performance testing has been performed and indicates non-compliance with the NO<sub>x</sub> emission limit.

**Permit Condition EU0040-002**

10 CSR 10-6.070

**New Source Performance Regulations**

40 CFR Part 60, Subpart GG

**Standards of Performance for Stationary Gas Turbines – Nitrogen Oxides (NO<sub>x</sub>)**

**Emission Limitation:**

**NOTE:** This combustion turbine (EU0040) is subject to the requirements of §60.332(a)(1) of 40 CFR Part 60 Subpart GG. Since the NO<sub>x</sub> emission standards of Subpart GG, at 15% O<sub>2</sub> dry basis as determined by §60.332(a)(1) are less stringent than the NO<sub>x</sub> emission limits of Permit No. 072002-004, the NSPS §60.332(a)(1) standards are not listed as permit conditions to this unit. Compliance with the NO<sub>x</sub> limits in this permit will assure compliance with the §60.332(a)(1) standards.

**Monitoring:**

1. The permittee shall monitor nitrogen content of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows: [40 CFR 60.334(b)]

If the turbine is supplied its fuel without intermediate bulk storage the values shall be determined and recorded daily. Owners, operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Administrator before they can be used to comply with 40 CFR 60.334(b).

[40 CFR 60.334(b)(2)]

U.S. EPA. Method 20 (40 CFR 60, Appendix A) shall be used to determine the NO<sub>x</sub> and oxygen concentrations.

[40 CFR 60.335(c)(3)]

**Recordkeeping:**

The permittee shall maintain records on-site for the most recent 60 months of all records required by this permit and shall immediately make such records available to any Missouri Department of Natural Resources' personnel upon request.

**Reporting:**

For the purposes of reports under §60.7(c) where applicable, periods of excess emissions that shall be reported are defined as follows: [§60.334(c)]

- a. *Emergency fuel.* Each period during which an exemption provided in 40 CFR 60.332(k) is in effect shall be included in the report required in 40 CFR 60.7(c). For each period, the type, reasons, and duration of

the firing of the emergency fuel shall be reported.  
[40 CFR 60.334(c)(4)]

**Permit Condition EU0040-003**

10 CSR 10-6.070

**New Source Performance Regulations**

40 CFR Part 60 Subpart GG

**Standards of Performance for Stationary Gas Turbines - Sulfur Dioxide (SO<sub>2</sub>)**

**Emission Limitation:**

The permittee shall comply with one or the other of the following conditions:

1. The permittee shall not cause to be discharged into the atmosphere from this gas turbine any gases which contain sulfur dioxide in excess of 0.015 percent by volume at 15 percent oxygen and on a dry basis. [40 CFR 60.333(a)]; or
2. No fuels shall be burned at this source which contain sulfur in excess of 0.8 percent by weight. [40 CFR 60.333(b)]

**Monitoring:**

The permittee shall monitor sulfur content of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows: [40 CFR 60.334(b)]

If the turbine is supplied its fuel without intermediate bulk storage the values shall be determined and recorded daily. Owners, operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Administrator before they can be used to comply with 40 CFR 60.334(b).  
[40 CFR 60.334(b)(2)]

The owner or operator shall determine compliance with the sulfur content standard in 40 CFR 60.333(b) as follows: [40 CFR 60.335(d)], and as necessary

ASTM D 2880-96 shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-90(94)E-1, D 3031-81(86), D 4084-94, or D 3246-92 shall be used for the sulfur content of gaseous fuels (incorporated by reference-see 40 CFR 60.17).

The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Administrator.

Analysis for fuel sulfur content of the natural gas shall be conducted using an approved alternative method. The approved alternative method shall mean the following:  
The Gas Processors Association's (GPA's) Standard 2377 (Test for Hydrogen Sulfide and Carbon Dioxide in Natural Gas Using Length of Stain Tubes), as currently in effect and as may be revised from time-to-time by the GPA. [Custom Schedule Condition 1a.]

**Recordkeeping**

The permittee shall maintain records of reports required under §60.7(c) and §60.334(c)(2), or pursuant to an approved custom fuel schedule.

The permittee shall maintain records on-site for the most recent 60 months of all records required by this permit and shall immediately make such records available to any Missouri Department of Natural Resources' personnel upon request.

**Reporting:**

For the purposes of reports under §60.7(c), periods of excess emissions that shall be reported are defined as follows: [§60.334(c)]

*Sulfur dioxide.* Any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8 percent.

[40 CFR 60.334(c)(2)]

Compliance with the approved custom fuel schedule is said to demonstrate compliance with this applicable standard.

*Emergency fuel.* Each period during which an exemption provided in 40 CFR 60.332(k) is in effect shall be included in the report required in 40 CFR 60.7(c). For each period, the type, reasons, and duration of the firing of the emergency fuel shall be reported.

[40 CFR 60.334(c)(4)]

The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the custom fuel schedule Recordkeeping indicates an exceedance with the applicable standard pursuant to the regulation.

EU0050 through EU0100 MMU Substation No. 3 – Diesel Engine Generators			
EU ID	EIQ Reference # (Year)	General Description	Manufacturer/Model #
EU0050	EP-11	1875 kW Diesel Engine Generator that fires only diesel fuel. Permitted in 2003.	Caterpillar, Model No. 3516B
EU0060	EP-12	1875 kW Diesel Engine Generator that fires only diesel fuel. Permitted in 2003.	Caterpillar, Model No. 3516B
EU0070	EP-13	1875 kW Diesel Engine Generator that fires only diesel fuel. Permitted in 2003.	Caterpillar, Model No. 3516B
EU0080	EP-14	1875 kW Diesel Engine Generator that fires only diesel fuel. Permitted in 2003.	Caterpillar, Model No. 3516B
EU0090	EP-15	1875 kW Diesel Engine Generator that fires only diesel fuel. Permitted in 2003.	Caterpillar, Model No. 3516B
EU0100	EP-16	1875 kW Diesel Engine Generator that fires only diesel fuel. Permitted in 2003.	Caterpillar, Model No. 3516B

**Permit Condition EU0050-001 through EU0100-001**

10 CSR 10-6.260

**Restriction of Emission of Sulfur Compounds**

10 CSR 10-6.060

**Construction Permits Required – Permit No. 092003-016, Issued on September 22, 2003**

**Emission Limitation**

Emissions from each of the units shall not contain more than 500 parts per million by volume (ppmv) of sulfur dioxide or more than 35 milligrams per cubic meter ( $\text{mg}/\text{m}^3$ ) of sulfuric acid or sulfur trioxide or any combination of those gases averaged on any consecutive three hour time period.

No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards. [10 CSR 10-6.260(4)<sup>2</sup> & 10 CSR 10-6.010 Ambient Air Quality Standards]

Pollutant	Concentration by Volume	Remarks
Sulfur Dioxide (SO <sub>2</sub> )	0.03 parts per million (ppm)	Annual arithmetic mean
	0.14 ppm (365 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ))	24-hour average not to be exceeded more than once per year
	0.5 ppm (1300 $\mu\text{g}/\text{m}^3$ )	three-hour average not to be exceeded more than once per year
Hydrogen Sulfide (H <sub>2</sub> S)	0.05 ppm (70 $\mu\text{g}/\text{m}^3$ )	½-hour average not to be exceeded over two times per year
	0.03 ppm (42 $\mu\text{g}/\text{m}^3$ )	½-hour average not to be exceeded over two times in any five consecutive days
Sulfuric Acid (H <sub>2</sub> SO <sub>4</sub> )	10 $\mu\text{g}/\text{m}^3$	24-hour average not to be exceeded more than once in any ninety consecutive days
	30 $\mu\text{g}/\text{m}^3$	One-hour average not to be exceeded more than once in any two consecutive days

The sulfur content of the fuel to be used in the six (6) Caterpillar Diesel Powered 3516B Generators (EP11 – 16) shall not exceed 0.05% by weight limit per shipment for distillate fuel oil. (Special Condition # 3)

**Monitoring and Recordkeeping:**

MMU shall maintain records of the fuel supplier certifications or analytical testing documentation on site for not less than five (5) years for Missouri Department of Natural Resources' review. (Special Condition # 3)

**Reporting:**

The permittee shall report any change of fuel type to the Air Pollution Control Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 within ten days of the switch of fuel types.

The permittee shall report to the Air Pollution Control Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which causes an exceedance of this regulation.

<sup>2</sup> 10 CSR10-6.260(4) is a state-only requirement

**Permit Condition EU0050-002 through EU0100-002**

10 CSR 10-6.060

**Construction Permits Required – Permit No. 092003-016, Issued on September 22, 2003**

**Emission Limitation**

Macon Municipal Utilities (MMU) shall emit less than forty (40) tons of nitrogen oxide (NOx) in any consecutive twelve (12) month period from the six (6) Caterpillar Diesel Powered 3516B Generators (EP11 – 16). (Special Condition 2A)

**Monitoring and Recordkeeping:**

MMU shall maintain an accurate record of NOx emitted into the atmosphere from the six (6) Caterpillar Diesel Powered 3516B Generators (EP11 – 16). Attachment C or an equivalent form shall be used for this purpose. MMU shall maintain all records required by this permit for not less than five (5) years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request.

**Reporting:**

MMU shall report to the Air Pollution Control Program's (APCP) Enforcement Section, P.O. Box 176, Jefferson City, Missouri 65102, no later than ten (10) days after the end of the month during which the records from Special Condition Number 2(B) indicate that the source exceeds the limitation of Special Condition Number 2(A).

## **IV. Core Permit Requirements**

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements.

### **10 CSR 10-6.050, Start-up, Shutdown and Malfunction Conditions**

- (a.) In the event of a malfunction, which results in excess emissions that exceed one hour, the permittee shall submit to the director within two business days in writing the following information:
- Name and location of installation;
  - Name and telephone number of person responsible for the installation;
  - Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered.
  - Identity of the equipment causing the excess emissions;
  - Time and duration of the period of excess emissions;
  - Cause of the excess emissions;
  - Air pollutants involved;
  - Best estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;
  - Measures taken to mitigate the extent and duration of the excess emissions; and
  - Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.

The permittee shall submit the paragraph (a.) information list to the director in writing at least ten days prior to any maintenance, start-up or shutdown, which is expected to cause an excessive release of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the planned occurrence, it shall be given as soon as practicable prior to the release. If an unplanned excess release of emissions exceeding one hour occurs during maintenance, start-up or shutdown, the director shall be notified verbally as soon as practical during normal working hours and no later than the close of business of the following working day. A written notice shall follow within ten working days.

Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under section 643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the paragraph (a.) list and shall be submitted not later than 15 days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other pertinent information available, the director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under section 643.080 or 643.151, RSMo.

Nothing in this rule shall be construed to limit the authority of the director or commission to take appropriate action, under sections 643.080, 643.090 and 643.151, RSMo to enforce the provisions of the Air Conservation Law and the corresponding rule.

Compliance with this rule does not automatically absolve the permittee of liability for the excess emissions reported.

### **10 CSR 10-6.060, Construction Permits Required**

The permittee shall not commence construction, modification, or major modification of any installation subject to this rule, begin operation after that construction, modification, or major modification, or begin operation of any installation which has been shut down longer than five years without first obtaining a permit from the permitting authority.



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**10 CSR 10-6.065, Operating Permits**

The permittee shall file for renewal of this operating permit no sooner than eighteen months, nor later than six months, prior to the expiration date of this operating permit. The permittee shall retain the most current operating permit issued to this installation on-site and shall immediately make such permit available to any Missouri Department of Natural Resources personnel upon request.

**10 CSR 10-6.110, Submission of Emission Data, Emission Fees and Process Information**

The permittee shall complete and submit an Emission Inventory Questionnaire (EIQ) in accordance with the requirements outlined in this rule.

The permittee shall pay an annual emission fee per ton of regulated air pollutant emitted according to the schedule in the rule. This fee is an emission fee assessed under authority of RSMo. 643.079 to satisfy the requirements of the Federal Clean Air Act, Title V.

The fees shall be due April 1 each year for emissions produced during the previous calendar year. The fees shall be payable to the Department of Natural Resources and shall be accompanied by the Emissions Inventory Questionnaire (EIQ) form or equivalent approved by the director.

**10 CSR 10-6.130, Controlling Emissions During Episodes of High Air Pollution Potential**

This rule specifies the conditions that establish an air pollution alert (yellow/red), watch or emergency and the associated procedures and emissions reduction objectives for dealing with each. The permittee shall submit an appropriate emergency plan if required by the Director.

**10 CSR 10-6.150, Circumvention**

The permittee shall not cause or permit the installation or use of any device or any other means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.

**10 CSR 10-6.180, Measurement of Emissions of Air Contaminants**

The director may require any person responsible for the source of emission of air contaminants to make or have made tests to determine the quantity or nature, or both, of emission of air contaminants from the source. The director may specify testing methods to be used in accordance with good professional practice. The director may observe the testing. All tests shall be performed by qualified personnel.

- (a.) The director may conduct tests of emissions of air contaminants from any source. Upon request of the director, the person responsible for the source to be tested shall provide necessary ports in stacks or ducts and other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.
- (b.) The director shall be given a copy of the test results in writing and signed by the person responsible for the tests.

**10 CSR 10-3.030 Open Burning Restrictions**

The permittee shall not conduct, cause, permit or allow a salvage operation, the disposal of trade wastes or burning of refuse by open burning.

- (c.) Exception - Open burning of trade waste or vegetation may be permitted only when it can be shown that open burning is the only feasible method of disposal or an emergency exists which requires open burning.
- (d.) Any person intending to engage in open burning shall file a request to do so with the director. The request shall include the following:
  - (1.) The name, address and telephone number of the person submitting the application; The type of business or activity involved; A description of the proposed equipment and operating practices, the type, quantity and composition of trade wastes and expected composition and amount of air contaminants to be released to the atmosphere where known;

- (2.) The schedule of burning operations;
- (3.) The exact location where open burning will be used to dispose of the trade wastes;
- (4.) Reasons why no method other than open burning is feasible; and
- (5.) Evidence that the proposed open burning has been approved by the fire control authority which has jurisdiction.
- (e.) Upon approval of the open burning permit application by the director, the person may proceed with the operation under the terms of the open burning permit. Be aware that such approval shall not exempt the Unionville Power Station from the provisions of any other law, ordinance or regulation.
- (f.) The permittee shall maintain files with letters from the director approving the open burning operation and previous DNR inspection reports.

**10 CSR 10-3.090 Restriction of Emission of Odors**

No person may cause, permit or allow the emission of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one volume of odorous air is diluted with seven volumes of odor-free air for two separate trials not less than 15 minutes apart within the period of one hour.

**This requirement is not federally enforceable.**

**10 CSR 10-6.100, Alternate Emission Limits**

Proposals for alternate emission limitations shall be submitted on Alternate Emission Limits Permit forms provided by the department. An installation owner or operator must obtain an Alternate Emission Limits Permit in accordance with 10 CSR 10-6.100 before alternate emission limits may become effective.

**10 CSR 10-6.080, Emission Standards for Hazardous Air Pollutants**

**40 CFR Part 61 Subpart M, National Emission Standard for Asbestos**

The permittee shall follow the procedures and requirements of 40 CFR Part 61, Subpart M for any activities occurring at this installation which would be subject to provisions for 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos.

The permittee shall conduct monitoring to demonstrate compliance with registration, certification, notification, and Abatement Procedures and Practices standards as specified in 40 CFR Part 61, Subpart M.

**10 CSR 10-6.250, Asbestos Abatement Projects – Certification, Accreditation, and Business Exemption Requirements**

The permittee shall conduct all asbestos abatement projects within the procedures established for certification and accreditation by 10 CSR 10-6.250. This rule requires individuals who work in asbestos abatement projects to be certified by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires training providers who offer training for asbestos abatement occupations to be accredited by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires persons who hold exemption status from certain requirements of this rule to allow the department to monitor training provided to employees. Each individual who works in asbestos abatement projects must first obtain certification for the appropriate occupation from the department. Each person who offers training for asbestos abatement occupations must first obtain accreditation from the department. Certain business entities that meet the requirements for state-approved exemption status must allow the department to monitor training classes provided to employees who perform asbestos abatement.

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**Title VI – 40 CFR Part 82, Protection of Stratospheric Ozone**

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- (a.) The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:  
All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106. The placement of the required warning statement must comply with the requirements pursuant to §82.108.  
The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110.  
No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
- (b.) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:  
Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.  
Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.  
Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.  
Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with Recordkeeping requirements pursuant to §82.166. ("MVAC-like" appliance as defined at §82.152).  
Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.  
Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.  
If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.  
If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.

The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *Federal Only - 40 CFR part 82*

**10 CSR 10-6.280, Compliance Monitoring Usage**

The permittee is not prohibited from using the following in addition to any specified compliance methods for the purpose of submission of compliance certificates:

Monitoring methods outlined in 40 CFR Part 64;

Monitoring method(s) approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and

Any other monitoring methods approved by the director.

Any credible evidence may be used for the purpose of establishing whether a permittee has violated or is in violation of any such plan or other applicable requirement. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred by a permittee:

Monitoring methods outlined in 40 CFR Part 64;

A monitoring method approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and

Compliance test methods specified in the rule cited as the authority for the emission limitations.

The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:

Applicable monitoring or testing methods, cited in:

10 CSR 10-6.030, "Sampling Methods for Air Pollution Sources";

10 CSR 10-6.040, "Reference Methods";

10 CSR 10-6.070, "New Source Performance Standards";

10 CSR 10-6.080, "Emission Standards for Hazardous Air Pollutants"; or

Other testing, monitoring, or information gathering methods, if approved by the director, that produce information comparable to that produced by any method listed above.

## V. General Permit Requirements

### Permit Duration

10 CSR 10-6.065(6)(C)1.B.

This permit is issued for a term of five years, commencing on the date of issuance. This permit will expire at the end of this period unless renewed.

### General Recordkeeping and Reporting Requirements

10 CSR 10-6.065(6)(C)1.C

#### Recordkeeping

All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.

Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources' personnel upon request.

#### Reporting

The permittee shall submit a report of all required monitoring by:

October 1st for monitoring which covers the January through June time period, and

April 1st for monitoring which covers the July through December time period.

Exception: Monitoring requirements which require reporting more frequently than semi annually shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken.

Each report must identify any deviations from emission limitations, monitoring, Recordkeeping, reporting, or any other requirements of the permit, this includes deviations or Part 64 exceedances.

All reports shall be submitted to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102.

Submit supplemental reports as required or as needed. Supplemental reports are required no later than ten days after any exceedance of any applicable rule, regulation or other restriction. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.

Notice of any deviation resulting from an emergency (or upset) condition as defined in paragraph (6)(C)7 of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if you wish to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and that you can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.

Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.

Any other deviations identified in the permit as requiring more frequent reporting than the permittee's semiannual report shall be reported on the schedule specified in the permit.

These supplemental reports shall be submitted to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any applicable rule, regulation, or other restriction.

Every report submitted shall be certified by the responsible official, except that, if a report of a deviation must be submitted within ten days after the deviation, the report may be submitted without a certification if the report is resubmitted with an appropriate certification within ten days after that, together with any corrected or supplemental information required concerning the deviation.  
The permittee may request confidential treatment of information submitted in any report of deviation.

#### **Risk Management Plans Under Section 112(r)**

10 CSR 10-6.065(6)(C)1.D.

The permittee shall comply with the requirements of 40 CFR Part 68, Accidental Release Prevention Requirements. If the permittee has more than a threshold quantity of a regulated substance in process, as determined by 40 CFR Section 68.115, the permittee shall submit a Risk Management Plan in accordance with 40 CFR Part 68 no later than the latest of the following dates:

June 21, 1999;

Three years after the date on which a regulated substance is first listed under 40 CFR Section 68.130; or

The date on which a regulated substance is first present above a threshold quantity in a process.

#### **Severability Clause**

10 CSR 10-6.065(6)(C)1.F.

In the event of a successful challenge to any part of this permit, all uncontested permit conditions shall continue to be in force. All terms and conditions of this permit remain in effect pending any administrative or judicial challenge to any portion of the permit. If any provision of this permit is invalidated, the permittee shall comply with all other provisions of the permit.

#### **General Requirements**

10 CSR 10-6.065(6)(C)1.G

- 1) The permittee must comply with all of the terms and conditions of this permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, permit termination, permit revocation and re-issuance, permit modification or denial of a permit renewal application.
- 2) The permittee may not use as a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
- 3) The permit may be modified, revoked, reopened, reissued or terminated for cause. Except as provided for minor permit modifications, the filing of an application or request for a permit modification, revocation and re-issuance, or termination, or the filing of a notification of planned changes or anticipated noncompliance, will not stay any permit condition.
- 4) This permit does not convey any property rights of any sort, nor grant any exclusive privilege.
- 5) The permittee shall furnish to the Air Pollution Control Program, upon receipt of a written request and within a reasonable time, any information that the Air Pollution Control Program reasonably may require to determine whether cause exists for modifying, reopening, reissuing or revoking the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the Air Pollution Control Program copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 10 CSR 10-6.065(6)(C)1.

#### **Incentive Programs Not Requiring Permit Revisions**

10 CSR 10-6.065(6)(C)1.H.

No permit revision will be required for any installation changes made under any approved economic incentive, marketable permit, emissions trading, or other similar programs or processes provided for in this permit.

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**Reasonably Anticipated Operating Scenarios**

10 CSR 10-6.065(6)(C)1.I.

The diesel engine generators EU0010 and EU0020 can operate on natural gas.

**Title IV Allowances**

Exempt from Title IV per 40 CFR 72.6(b).

**Emissions Trading**

10 CSR 10-6.065(6)(C)1.J.

Not Applicable

**Compliance Requirements**

10 CSR 10-6.065(6)(C)3.

Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official.

Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the Missouri Department of Natural Resources, or their authorized agents, to perform the following (subject to the installation's right to seek confidential treatment of information submitted to, or obtained by, the Air Pollution Control Program):

Enter upon the premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this permit;

Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and

As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.

All progress reports required under an applicable schedule of compliance shall be submitted semiannually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:

Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved, and

An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.

The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually on April 1<sup>st</sup>, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to EPA Region VII, 901 North 5<sup>th</sup> Street, Kansas City, Kansas 66101, as well as the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and Part 64 exceedances and excursions must be included in the compliance certifications. The compliance certification shall include the following:

The identification of each term or condition of the permit that is the basis of the certification,

The current compliance status, as shown by monitoring data and other information reasonably available to the installation,

Whether compliance was continuous or intermittent,

The method(s) used for determining the compliance status of the installation, both currently and over the reporting period, and

Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

### **Permit Shield**

10 CSR 10-6.065(6)(C)6.

Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as of the date that this permit is issued, provided that:

The applicable requirements are included and specifically identified in this permit; or

The permitting authority, in acting on the permit revision or permit application, determines in writing that other requirements, as specifically identified in the permit, are not applicable to the installation, and this permit expressly includes that determination or a concise summary of it.

Be aware that there are exceptions to this permit protection. The permit shield does not affect the following:

The provisions of section 303 of the Act or section 643.090, RSMo concerning emergency orders,

Liability for any violation of an applicable requirement which occurred prior to, or was existing at, the time of permit issuance,

The applicable requirements of the acid rain program,

The administrator's authority to obtain information, or

Any other permit or extra-permit provisions, terms or conditions expressly excluded from the permit shield provisions.

### **Emergency Provisions**

10 CSR 10-6.065(6)(C)7.

An emergency or upset as defined in 10 CSR 10-6.065(6)(C)7. shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emissions limitations. To establish an emergency- or upset-based defense, you must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:

That an emergency or upset occurred and that you can identify the source of the emergency or upset,

That the installation was being operated properly,

That you took all reasonable steps to minimize emissions that exceeded technology-based emissions limitations or requirements in this permit, and

That you submitted notice of the emergency to the Air Pollution Control Program within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.

Be aware that an emergency or upset shall not include noncompliance caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

### **Operational Flexibility**

10 CSR 10-6.065(6)(C)8.

An installation that has been issued a Part 70 operating permit is not required to apply for or obtain a permit revision in order to make any of the changes to the permitted installation described below if the changes are not Title I modifications, the changes do not cause emissions to exceed emissions allowable under the permit, and the changes do not result in the emission of any air contaminant not previously emitted. The permittee shall notify the Air Pollution Control Program and the Administrator at least seven days in advance of these changes, except as allowed for emergency or upset conditions. Emissions allowable under the permit means a federally enforceable permit term or condition determined at issuance to be required by an applicable requirement that established an emissions limit (including a work practice standard) or a federally enforceable emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.



Section 502(b)(10) changes. Changes that, under section 502(b)(10) of the Act, contravene an express permit term may be made without a permit revision, except for changes that would violate applicable requirements of the Act or contravene federally enforceable monitoring (including test methods), Recordkeeping, reporting or compliance requirements of the permit.

Before making a change under this provision, The permittee shall provide advance written notice to the Air Pollution Control Program and to the Administrator, describing the changes to be made, the date on which the change will occur, and any changes in emission and any permit terms and conditions that are affected. The permittee shall maintain a copy of the notice with the permit, and this agency shall place a copy with the permit in the public file. Written notice shall be provided to the administrator and this agency at least seven days before the change is to be made. If less than seven days notice is provided because of a need to respond more quickly to these unanticipated conditions, The permittee shall provide notice to the administrator and the permitting authority as soon as possible after learning of the need to make the change.

The permit shield shall not apply to these changes.

### **Off-Permit Changes**

10 CSR 10-6.065(6)(C)9.

Except as noted below, The permittee may make any change in its permitted operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Insignificant activities listed in the application, but not otherwise addressed in or prohibited by this permit, shall not be considered to be constrained by this permit for purposes of the off-permit provisions of this section. Off-permit changes shall be subject to the following requirements and restrictions:

The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; The permittee may not change a permitted installation without a permit revision, if this change is subject to any requirements under Title IV of the Act or is a Title I modification;

The permittee must provide written notice of the change to the permitting authority and to the administrator no later than the next annual emissions report. This notice shall not be required for changes that are insignificant activities under paragraph (6)(B)3. of this rule. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change.

The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes; and

The permit shield shall not apply to these changes.

### **Responsible Official**

10 CSR 10-6.020(2)(R)12.

The application utilized in the preparation of this was signed by Vern Kincheloe, General Manager. If this person terminates employment, or is reassigned different duties such that a different person becomes the responsible person to represent and bind the installation in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Director of the Air Pollution Control Program of the change. Said notification shall be in writing and shall be submitted within 30 days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the installation in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the installation until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

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**Reopening Permit For Cause**

10 CSR 10-6.065(6)(E)6.

In accordance with 10 CSR 10-6.065(6)(E)6.A., this permit may be reopened with cause if:

- 1) The Missouri Department of Natural Resources (MDNR) receives notice from the Environmental Protection Agency (EPA) that a petition for disapproval of a permit pursuant to 40 CFR § 70.8(d) has been granted, provided that the reopening may be stayed pending judicial review of that determination,
- 2) MDNR or EPA determines that the permit contains a material mistake or that inaccurate statements were made which resulted in establishing the emissions limitation standards or other terms of the permit,
- 3) Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the installation and the installation receives authorization for coverage under that general permit,
- 4) The installation is an affected source under the acid rain program and additional requirements (including excess emissions requirements), become applicable to that source, provided that, upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the permit; or
- 5) MDNR or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

**Statement of Basis**

10 CSR 10-6.065(6)(E)1.C.

This permit is accompanied by a statement setting forth the legal and factual basis for the draft permit conditions (including references to applicable statutory or regulatory provisions). This Statement of Basis, while referenced by the permit, is not an actual part of the permit.

**Attachment A**  
**10 CSR 10-6.170 Compliance Demonstration**  
**Fugitive Emission Observations**

This recordkeeping sheet or an equivalent sheet may be used to meet the recordkeeping requirements for Permit Condition PW001.

[illegible]

## Monthly NO<sub>x</sub> Compliance Worksheet for EU0030– MMU-NEMO Generating Station

This Sheet covers the period from \_\_\_\_\_ to \_\_\_\_\_.  
(month, year) (month, year)

Date	Hours of Operation	Emission Rate (lb/hour) (Note 1)	NO <sub>x</sub> Emissions (Tons) (Note 2)
Total NO <sub>x</sub> Emissions for this Month (Note 3)			
12-Month NO <sub>x</sub> Emissions Total from Previous Month's Worksheet (Note 4)			
Monthly NO <sub>x</sub> Emissions Total from Previous Year's Worksheet (Note 5)			
Current 12-Month Total NO <sub>x</sub> Emissions (Note 6)			

Note 1: Emission rate determined from stack emissions data.

**Note 2: Monthly NO<sub>x</sub> emissions will be based upon stack emissions data.**

$$\text{NO}_x \text{ Emissions} = [(\text{hours of operation}) \times (\text{emission rate})]/2000$$

**Note 3: Sum of NO<sub>x</sub> emissions reported for the combustion turbine for the month.**

**Note 4: Running 12-month total NO<sub>x</sub> emissions from the previous month's worksheet.**

**Note 5: NO<sub>x</sub> emissions reported for this month in the last calendar year.**

Note 6: Amount reported for Note 4 minus the amount reported for Note 5 plus the amount reported for Note 3, not to exceed 40.0 tons for any consecutive 12-month period.

Attachment C

**Monthly NO<sub>x</sub> Compliance Worksheet for EU0050 through EU0100– MMU-Substation No. 3**

This Sheet covers the period from \_\_\_\_\_ to \_\_\_\_\_.  
(month, year) (month, year)

Date	Emission Point	Description	Amount of Fuel Used This Month (Gallons)	Emission Factor (lb/gallon)	Emissions (lb) (Note 1)	NO <sub>x</sub> Emissions (Tons) (Note 2)
	EP-11	Caterpillar 3516B Engine		0.321		
	EP-12			0.321		
	EP-13			0.321		
	EP-14			0.321		
	EP-15			0.321		
	EP-15			0.321		
Total NO <sub>x</sub> Emissions for this Month (Note 3)						
12-Month NO <sub>x</sub> Emissions Total from Previous Month's Worksheet (Note 4)						
Monthly NO <sub>x</sub> Emissions Total from Previous Year's Worksheet (Note 5)						
Current 12-Month Total NO <sub>x</sub> Emissions (Note 6)						

**Note 1: Emissions (lb) = (Amount of Fuel Used This Month) x (Emission Factor)**

Note 2: Monthly NO<sub>x</sub> emissions (tons) = (Emissions in lb as Determined in Note 1)/2000

Note 3: Sum of NO<sub>x</sub> emissions reported for the Four Engines for the month.

Note 4: Running 12-month total NO<sub>x</sub> emissions from the previous month's worksheet.

Note 5: NO<sub>x</sub> emissions reported for this month in the last calendar year.

Note 6: Amount reported for Note 4 minus the amount reported for Note 5 plus the amount reported for Note 3, not to exceed 40.0 tons for any consecutive 12-month period.

## STATEMENT OF BASIS

### Permit Reference Documents

These documents were relied upon in the preparation of the operating permit. Because they are not incorporated by reference, they are not an official part of the operating permit.

- 1) Part 70 Operating Permit Renewal Application, received November 18, 2002;
- 2) Initial Part 70 Operating Permit (121-0004-0001) Issued on May 19, 1998.
- 3) 2002 Emissions Inventory Questionnaire, received March 19, 2003;
- 4) 2001 Emissions Inventory Questionnaire, received February 19, 2002;
- 5) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition.

### Applicable Requirements Included in the Operating Permit but Not in the Application

In the operating permit application, the installation indicated they were not subject to the following regulation(s). However, in the review of the application, the agency has determined that the installation is subject to the following regulation(s) for the reasons stated.

#### 10 CSR 10-6.180, *Measurement of Emissions of Air Contaminants*,

This rule has been included in the operating permit in order to provide citing for the allowance of requests for emissions data results. On past forms issued by the Air Pollution Control Program, including the application for this permit, it was automatically marked as an administrative rule not required to be listed as an applicable requirement. It is no longer judged to be solely administrative and is, therefore, included in the operating permit.

#### Title VI – 40 CFR Part 82, *Protection of Stratospheric Ozone*,

This rule has been included in the operating permit in order to provided citing for the use of ozone depleting substances.

#### 40 CFR Part 68, *Chemical Accident Prevention Provisions*,

This rule has been included in the operating permit as part of the General Permit Requirements.

### Other Air Regulations Determined Not to Apply to the Operating Permit

The Air Pollution Control Program (APCP) has determined the following requirements to not be applicable to this installation at this time for the reasons stated.

#### 10 CSR 10-3.080, *Restriction of Emission of Visible Air Contaminants*,

This rule was rescinded on May 30, 2000. Control of emission of visible air contaminants is addressed in 10 CSR 10-6.220.

10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants,*

This rule does not apply to internal combustion engines operated outside the Kansas City or St. Louis metropolitan areas and stationary internal combustion engines operating in the Kansas City or St. Louis metropolitan areas. This rule also does not apply to other emission sources at the facility such as fuel storage tanks, since they emit VOCs, which do not cause opacity.

10 CSR 10-6.240, *Asbestos Abatement Projects-Certification, Notification and Performance Requirements,*

This rule has not been included in the operating permit because the rule was struck down in the Cole County circuit court.

10 CSR 10-6.350, *Emission Limitations and Emissions Trading of Oxides of Nitrogen,*

This rule applies to any fossil fuel fired electric generating unit that serves a generator with a nameplate capacity of greater than twenty-five megawatts. The combustion turbine and the diesel engines have a nameplate capacity of less than twenty-five megawatts each, therefore, they are not subject to this regulation.

10 CSR 10-6.400, *Restriction of Emission of Particulate Matter From Industrial Processes,*

This regulation defines process weight to "exclude liquids and gases used solely as fuels and air introduced for purposes of combustion" under 10 CSR 10-6.400(2)(A). For the internal combustion engines (ICEs) at this installation, the throughputs only consist of liquid and gas fuels and combustion air. Therefore, there are no applicable throughputs for the ICEs and the other emission sources at this installation have no or insignificant particulate emissions. Therefore, no emission sources at this installation were considered to be applicable to this regulation and it was not included in the operating permit.

### **Construction Permit Revisions**

The Special Condition No. 1 of the Construction Permit No. 072002-004, Issued on June 11, 2002 states the following: "*The permittee shall not discharge into the atmosphere from the combustion turbine and the heat recovery steam generator greater than 40 tons of NO<sub>x</sub> in any consecutive 12-month period.*"

The above language allows the facility to emit 40 tons of NO<sub>x</sub> which was not the intent of the permit.

Thus the language of the Special Condition No. 1 was changed to: *"The permittee shall emit less than forty (40) tons of nitrogen oxides NO<sub>x</sub> in any consecutive 12-month period from the combustion turbine and the heat recovery steam generator."*

### **NSPS Applicability**

10 CSR 10-6.070, *New Source Performance Regulations*

40 CFR Part 60, Subpart GG, *Standards of Performance for Stationary Gas Turbines*

The provisions of this subpart are applicable to all stationary gas turbines, which commence construction, modification, or reconstruction after October 3, 1977, with a heat input at peak load equal to or greater than 10.7 gigajoules per hour, based on the lower heating value of the fuel fired.

The combustion turbine (EU0040) was constructed in 2002 and has a peak load greater than 10.7 gigajoules per hour. Therefore, NSPS Subpart GG applies to the combustion turbine (EU0040).

10 CSR 10-6.070, *New Source Performance Regulations*

40 CFR Part 60, Subpart K, *Standards of Performance for Storage Vessels for Petroleum Liquids for Which*

*Construction, Reconstruction, or Modification Commenced after June 11, 1973, and Prior to May 19, 1978*

40 CFR Part 60, Subpart Kb, *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984*

The two-(2) 10,000 gallon capacity diesel storage tanks (EP-5 and 6) were installed in 1968. Therefore, the above NSPS rules do not apply.

### **MACT Applicability**

The combined facility is a minor source for HAP emissions. Therefore, there are no MACT standards that are currently applicable to this facility.

### **NESHAP Applicability**

10 CSR 10-6.080, *Emission Standards for Hazardous Air Pollutants, Subpart M, National Standards for Asbestos*

The requirements of this rule have been summarized and listed in the operating permit.

### **Other Regulatory Determinations**

Combined Facility Determination



A determination that the Macon Municipal Power Plant, MMU-NEMO Generating Station and MMU-Substation No. 3 are a single facility for the purpose of construction permitting was made during the permit review for Construction Permit Nos. 072002-004 and 022003-012. The determination basically states that although the three installations are within a few miles of each other and therefore not adjacent, they are under common control and provide power to the same power pool. Please refer to the detailed discussion regarding this topic under the "Installation Description" Section of the Construction Permit No. 072002-004.

The same reasoning, as provided in these construction permits, has been used in this Title V Review. Consequently, the three installations are being reviewed as one facility under this permit and are collectively referred to as Macon Municipal Power Plant.

#### 40 CFR Part 64, *Compliance Assurance Monitoring (CAM)*

The CAM rule applies to each pollutant specific emission unit that meets the following:  
Be subject to an emission limitation or standard, and  
Use a control device to achieve compliance, and  
Have pre-control emissions that exceed or are equivalent to the major source threshold.

40 CFR Part 64 is not applicable because none of the pollutant-specific emission units uses a control device to achieve compliance with a relevant standard.

#### 10 CSR 10-6.260, *Restriction of Emission of Sulfur Compounds*

The original Title V Permit for the Macon Municipal Power Plant (Permit No. 121-0004-0001) allowed the permittee to combust fuel that has a sulfur content by weight of up to 3 percent in the Nordberg Engine (EU0010 in this permit), and up to 0.8 percent sulfur by weight in the Worthington and Caterpillar Engines (EU0020 and EU0030 in this permit, respectively). These sulfur limits were based on a back calculation from the allowable sulfur dioxide limits in ppmv for existing (pre-1971) and new engines (1971 and post 1971).

Fuel and distillate oil greater than 0.5 weight percent sulfur are no longer sold in Missouri as stipulated under Chapter 414 RSMo (Revised Missouri Statutes) and as administered by the Missouri Department of Agriculture. Therefore, the fuel sulfur content limit by weight was reset to 0.5 percent in this Permit for EU0010 through EU0030. For emission units EU0050 through EU0080, the construction permit 022003-012 has imposed a stricter restriction of 0.05 percent by weight of sulfur in fuel instead of the 0.5 weight percent sulfur; therefore the stricter limit has been listed for these emission units.

STATE OF MISSOURI  
DEPARTMENT OF NATURAL RESOURCES  
MISSOURI AIR CONSERVATION COMMISSION



PERMIT BOOK

## PERMIT TO CONSTRUCT

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the air contaminant source(s) described below, in accordance with the laws, rules, and conditions as set forth herein.

Permit Number: 072002-004

Project Number: 2002-03-015

Owner: Macon Power Plant-City of Macon

Owner's Address: 326 Vine Street, Macon, Missouri 63552

Installation Name: MMU-NEMO Generating Station

Installation Address: 30211 Major Avenue, Macon, Missouri 63552

Location Information: Macon County, S17, T57N, R13W

Application for Authority to Construct was made for:

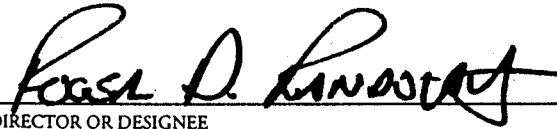
Installation of a combined cycle gas turbine driven generator in Macon, Missouri. The gas turbines will be a Solar Mars Model 100 (T-15000)S unit. This unit is capable of producing ten (10) megawatts (MW) of electricity which will be sent to the Missouri Public Utility Alliance Power Pool. This review was conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

☐ Standard Conditions (on reverse) are applicable to this permit.

☒ Standard Conditions (on reverse) and Special Conditions (listed as attachments starting on page 2) are applicable to this permit.

JUN 11 2002

EFFECTIVE DATE

  
DIRECTOR OR DESIGNEE  
DEPARTMENT OF NATURAL RESOURCES

## STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two (2) years from the effective date of this permit. Permittee should notify the Air Pollution Control Program if construction or modification is not begun within 2 years after the effective date of this permit, or if construction or modification is suspended for one year or more.

**You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit, and the project review.** Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant source(s). The information must be made available not more than sixty (60) days but at least thirty (30) days in advance of this date. Also, you must notify the DNR Regional office responsible for the area within which you are located within fifteen (15) days after the actual start up of this (these) air contaminant source(s).

A copy of this permit and permit review shall be kept at the installation address and shall be made available to Department of Natural Resources' personnel upon request.

You may appeal this permit or any of the listed special conditions as provided in RSMo 643.075. If you choose to appeal, the Air Pollution Control Program must receive your written declaration within thirty (30) days of receipt of this permit.

If you choose not to appeal, this certificate, the project review, your application, and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant source(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources, and other applicable federal, state, and local laws and ordinances.

The Department of Natural Resources has established a Technical Assistance Program to help in completing future applications or fielding complaints about the permitting process. You are invited to contact them at 1-800-361-4827 or 573-526-6627, or in writing addressed to Technical Assistance Program, P.O. Box 176, Jefferson City, MO 65102.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit at (573) 751-4817. If you prefer to write, please address your correspondence to the Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, attention Construction Permit Unit.

2002-03-015

Macon Power Plant-City of Macon

326 Vine Street, Macon, Missouri 63552

MMU-NEMO Generating Station

30211 Major Avenue, Macon, Missouri 63552

Macon County, S17, T57N, R13W

Installation of a combined cycle gas turbine driven generator in Macon, Missouri. The gas turbines will be a Solar Mars Model 100 (T-15000)S unit. This unit is capable of producing ten (10) megawatts (MW) of electricity which will be sent to the Missouri Public Utility Alliance Power Pool. This review was conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

Page No.	2
Permit No.	
Project No.	2002-03-015

# SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

## MMU-NEMO Generating Station Macon County, S17, T57N, R13W

1. Emission Limitations – Nitrogen Oxides (NO<sub>x</sub>)
  - A. Macon Power Plant-City of Macon shall not discharge into the atmosphere from the Combustion Turbine and Heat Recovery Steam Generator (EP1 at MMU-NEMO Generating Station) NO<sub>x</sub> in excess of 40 tons in any consecutive 12-month period.
  - B. Macon Power Plant-City of Macon shall keep monthly records that are adequate to determine the NO<sub>x</sub> emissions from the Combustion Turbine and Heat Recovery Steam Generator. These records shall also indicate the total quantity of NO<sub>x</sub> emissions from the installation over the previous 12-month period. The records will utilize an emission factor developed during NO<sub>x</sub> compliance testing (Special Condition 3) from at least three (3) different representative operating scenarios. Attachment A, *NO<sub>x</sub> Compliance Worksheet*, or an equivalent form of the company's own design, is suitable for this purpose. The most recent 60 months of records shall be maintained on-site and shall be made immediately available to Missouri Department of Natural Resources personnel upon request.
  - C. Macon Power Plant-City of Macon shall report to the Air Pollution Control Program's Enforcement Section, P. O. Box 176, Jefferson City, Missouri 65102, no later than ten (10) days after the end of each month, if the 12-month cumulative total (Special Condition 1.B) records show that the source exceeded the limitation of Special Condition 1.A (40 tons of NO<sub>x</sub>). If the NO<sub>x</sub> emissions from the Combustion Turbine and Heat Recovery Steam Generator exceed the 40 ton per year emission limitation (Special Condition 1.A), Macon Power Plant-City of Macon will be required to be re-evaluated under the Prevention of Significant Deterioration review.
2. Operational Limitation
  - A. No fuels other than natural gas shall be combusted in the Combustion Turbine and Heat Recovery Steam Generator at any time at this site.
  - B. Macon Power Plant-City of Macon shall not operate this turbine at loads less than fifty percent (50%) unless the turbine is in startup or shutdown mode.
  - C. At least once every year, after commencement of operation, Macon Power Plant-City of Macon shall obtain from the fuel vendors or conduct their own fuel analysis to evaluate the typical sulfur content weight percent for natural gas. The fuel consumption records and statement shall be

Page No.	3
Permit No.	
Project No.	2002-03-015

### SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

kept on-site for five (5) years and shall be made immediately available to the Missouri Department of Natural Resources' personnel upon request.

#### 3. Compliance Testing

- A. Stack tests shall be performed for CO and NO<sub>x</sub> on the Combustion Turbine and Heat Recovery Steam Generator at the installation in order to develop the emission factor(s) used to demonstrate compliance with Special Condition 1 and verify CO emissions from the Combustion Turbine and Heat Recovery Steam Generator. The emission tests should provide emission factors for CO and NO<sub>x</sub> for a full range of loads on the turbines (i.e. at loads from 50% to 100%) so that an accurate estimate of CO and NO<sub>x</sub> emissions from the installation during all modes of operation can be determined. The installation shall conduct tests that represent, at a minimum, three (3) different operational scenarios for each pollutant.
- B. The emission tests required by this permit for the turbines shall be conducted in accordance with the following methods and procedures.
  - 1) The test methods and procedures outlined in 40 CFR §60.335, *Test methods and procedures*, shall be adhered to by the applicant in testing for NO<sub>x</sub> from the combustion turbines. EPA Method 20 or other method approved by the Director shall be used to determine the NO<sub>x</sub> emission rate.
  - 2) The test methods and procedures outlined in 40 CFR Part 60, Appendix A, Method 10 or other method approved by the Director, shall be adhered to by the applicant in testing for CO.
- C. The stack tests required by this permit shall be performed within 60 days after achieving the maximum production rate at which the turbines will be operated, but not later than 180 days after initial start-up for commercial operation of the turbines and shall be conducted in accordance with the Stack Test Procedures outlined in Special Condition 3.B.
- D. The date on which performance tests are conducted must be pre-arranged with the Air Pollution Control Program a minimum of 30-days prior to the proposed test date. The Program may arrange a pretest meeting, if necessary. A completed Proposed Test Plan form (copy enclosed) may serve the purpose of notification and must be approved by the Air Pollution Control Program prior to conducting the required emission testing.
- E. Two (2) copies of a written report of the performance test results shall be submitted to the Director of the Air Pollution Control Program within 30-

Page No.	4
Permit No.	
Project No.	2002-03-015

#### SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

days of completion of any required testing. The report must include legible copies of the raw data sheets, analytical instrument laboratory data, and complete sample calculations from the required EPA Method for at least one (1) sample run.

- F. The test report is to fully account for all operational and emission parameters addressed by these permit conditions as well as in Subpart GG of the NSPS.
- G. Macon Power Plant-City of Macon shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, Missouri 65102, no later than ten (10) days after the end of the month, in which performance testing has been performed and indicates non-compliance with Special Condition 1.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE  
SECTION (5) REVIEW

Project Number: 2002-03-015  
Installation ID Number: 121-0004  
Permit Number:

MMU-NEMO Generating Station  
30211 Major Avenue  
Macon, Missouri 63552

Complete: March 15, 2002  
Reviewed: April 11, 2002

Parent Company:  
Macon Power Plant-City of Macon  
326 Vine Street  
Macon, Missouri 63552

Macon County, S17, T57N, R13W

REVIEW SUMMARY

- Macon Power Plant has applied for authority to install a combined cycle gas turbine driven generator with a maximum output of ten 10 MW to provide power to the Missouri Public Utility Alliance Power Pool.
- Insignificant amounts of Hazardous Air Pollutant (HAP) emissions are expected from the combustion of natural gas.
- 40 CFR Part 60 Subpart GG of the New Source Performance Standards (NSPS), *Standards of Performance for Stationary Gas Turbines*, apply to the proposed equipment. The heat input of the gas turbine is not greater than 250 MMBTU per hour. Therefore, Subparts D and Da do not apply to this installation.
- None of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) or currently promulgated Maximum Achievable Control Technology (MACT) regulations apply to the proposed equipment. MACT Subpart YYYYY, *Combustion Turbines*, is an Upcoming MACT that may apply to this equipment.
- No air pollution control equipment is being used in association with the new equipment. However, a heat recovery steam generator will be used to increase operating efficiency.
- This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of nitrogen oxides (NO<sub>x</sub>) are conditioned de minimis levels.
- This installation is located in Macon County, an attainment area for all criteria air pollutants.



- This installation is not on the List of Named Installations [10 CSR 10-6.020(3)(B), Table 2].
- Although PM<sub>10</sub> emissions were below de minimis levels, ambient air quality modeling was performed to determine the impact of PM<sub>10</sub> emissions.
- Emissions testing is required for the equipment.
- Approval of this permit is recommended with special conditions.

### INSTALLATION DESCRIPTION

Macon Power Plant-City of Macon is an existing major source located in Macon, Missouri. A Part 70 Operating Permit was issued in May 1998 (Project Number 121-0004-020). Macon Power Plant-City of Macon is responsible for peaking power generation for the City of Macon. The installation consists of three (3) electrical power generating peaking internal combustion engines, three (3) number 2 distillate oil storage tanks and one (1) lube oil storage tank.

The MMU-NEMO Generating Station will be located 4.5 miles from the existing Macon Power Plant. The new site is adjacent to an existing ethanol plant owned by Northeast Missouri Grain, LLC. After evaluating this application, it was determined that the MMU-NEMO Generating Station should be considered a single installation with the Macon Power Plant-City of Macon and a separate installation from Northeast Missouri Grain.

Installation is defined by 10 CSR 10-6.020 (2)(I)(7) as the following:

“All source operations including activities that result in fugitive emissions, that belong to the same industrial grouping ..., and any marine vessels while docked at the installation, located on one (1) or more contiguous or adjacent properties and under the control of the same person...”

The MMU-NEMO Generating Station will generate electricity for the City of Macon and the Missouri Public Utility Alliance Power Pool. Hence the industrial grouping for the new power plant will be the same as the existing Macon Power Plant. In addition, the MMU-NEMO Generating Station will be owned and operated by the Macon Power Plant-City of Macon. Therefore the new site will be under the control of the same company.

In defining the phrase “contiguous or adjacent properties”, a common sense notion of “source” was employed. The phrase “common sense notion” appears on page 52695 of the August 7, 1980, PSD preamble, with regard to how to define “source.” The applicant indicated that they own and maintain the natural gas pipeline that will supply natural gas to the new site. In addition, all of the electricity generated by the gas turbine will be directed to Macon Power Plant-City of Macon, where it is connected to the grid. Despite the distance between the MMU-NEMO Generating Station and the existing power plant, both will be considered a single source.

The distance between the facilities is not an overriding factor that would prevent them from being considered a single source. A similar determination was reached by the Air Pollution Control Program for the Rolla Municipal Utilities (Project Number 2000-11-006) for six (6) different substation locations within Rolla, Missouri, and for the City of Farmington (Project Number 2001-12-006) for internal combustion diesel engine generators. Therefore, for permitting purposes, the MMU-NEMO Generating Station and Macon Power Plant-City of Macon meet the requirements for being and are considered one (1) installation, and will be referred as Macon Power Plant in this permit.

In contrast, the Macon Power Plant will not be considered a single source with the existing ethanol plant. Although the power plant is located on property adjacent to the ethanol plant, the other requirements for a single source are not met. The power plant and the ethanol plant belong to two (2) separate industrial groupings: electric power generation and chemical manufacturing, respectively. In addition, "control" has not been established between the ethanol plant and the power plant. The EPA has applied the definition of control set forth in the regulations (45 FED. Reg. 59874, 59878, Sept. 11, 1980) of the Securities and Exchange Commission (SEC) which states:

Control is the possession, direct or indirect, of the power to direct or cause the direction of the management and policies of a person (or organization or association) whether through the ownership of voting shares, contract, or otherwise.

Control can be established through contractual agreement giving one plant decision-making authority over the operations of the second plant. Control is also considered when a relationship exists between the two plants such that one would not exist apart from the other.

At the time of this review, there was no contractual agreement between Macon Power Plant and the existing ethanol plant for the exchange of the steam produced at the power plant. However, it was indicated by the applicant that a future contract will exist for the lease of the land, which is owned by Northeast Missouri Grain, LLC, and the exchange of steam. Despite any contract which may occur between the two plants, steam is a by-product of the gas turbine and not necessary for the operation of the power plant. The exchange of steam is solely based on increased efficiency for both the power plant and the ethanol plant. Northeast Missouri Grain, LLC has gas-fired boilers that provide all of the steam necessary for independent operation. Macon Power Plant generates electricity for the City of Macon and for the Missouri Public Utility Alliance Power Pool. None of the electricity generated by the gas turbine will be sent to the ethanol plant. Both plants are independently operated and therefore considered two sources.

The following construction permit has been issued to Macon Power Plant from the Air Pollution Control Program.

Permit Number	Description
0289-014A	Installation of an 800 kW 3512 TA Caterpillar Diesel Generator

## PROJECT DESCRIPTION

Macon Power Plant is proposing to install a Solar Mars 100 Combustion Turbine with a Heat Recovery Steam Generator (HRSG). The gas turbine engine is a SoLoNO<sub>x</sub> Mars 100S, which includes Solar's dry low NO<sub>x</sub> combustor system. Natural gas is the primary fuel of combustion. Only pipeline grade natural gas, which has very low sulfur content, will be used in this gas turbine. The low sulfur content in the fuel will effectively limit SO<sub>x</sub> emissions.

Combustion turbines are heat engines that convert latent fuel energy into work using compressed hot gas as the working medium. Combustion turbines deliver mechanical output by means of a rotating shaft used to drive an electrical generator thereby converting a portion of the engine's mechanical output to electrical energy. Ambient air is first filtered and then compressed by the combustion turbine compressor. The combustion turbine compressor increases the pressure of the combustion air stream and also raises its temperature. During warm days when the ambient air temperature exceeds 65 degrees Fahrenheit (°F), the turbine inlet ambient air is cooled by an evaporative cooler or fogger, thus providing dense air for combustion and improving the power outputs. The compressed combustion air is then combined with natural gas fuel and burned in the combustion turbine's high-pressure combustor to produce hot exhaust gases. These high pressure, hot gases will then expand and turn the combustion turbine to produce rotary shaft power, which is used to drive an electric generator as well as the combustion turbine's combustion air compressor. The hot exhaust gases from the combustion turbines then flow to the HRSG for the production of low and high-pressure steam. The exhaust heat from the combustion turbine will be routed to the HRSG to recover heat and produce steam. The steam produced in the HRSG will be sent to the adjacent ethanol plant. Once the exhaust heat is recovered, exhaust gases are discharged into the atmosphere.

This gas turbine will be subject to NSPS Subpart GG, *Standards of Performance for Stationary Gas Turbines*. However, Macon Power Plant will not use water injection to control NO<sub>x</sub> emissions. Therefore, a continuous monitoring system is not required and this turbine is not subject to 40 CFR §60.334(a).

Supplemental duct firing will not occur in the HRSG, and no duct burners are being permitted for the HRSG. Therefore, NSPS Subpart Db, *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units*, does not apply to this equipment.

## EMISSIONS/CONTROLS EVALUATION

The emission rates for NO<sub>x</sub>, CO and VOC for this project were obtained from the vendor and from Macon Power Plant's application. Potential emissions were calculated based upon the operating scenario with the highest emission rate for each pollutant and assuming continuous operation (8760 hours annually).

The potential emissions of NO<sub>x</sub> from this operation are based on an emission rate of 0.10 pounds per MMBTU at 100 percent load and 88.6 °F or 25 ppmv. Potential emissions are above de *minimis* levels. However, the applicant has requested a

limitation on the emission of NO<sub>x</sub> to avoid review under Section (8). Performance testing is required as a condition of this permit to ensure the NO<sub>x</sub> limitation will be met for a full range of loads. Expected hours of operation based on the limitation of the potential NO<sub>x</sub> emissions is 6592 hours annually. Actual operational hours will be based on compliance with the NO<sub>x</sub> limitation using the emission rate determined by performance testing. The limitation of NO<sub>x</sub> emissions will indirectly limit the other pollutants. If testing indicates that NO<sub>x</sub> is not the limiting pollutant, Macon Power Plant will be required to contact the APCP for re-evaluation.

The emission rates for PM<sub>10</sub>, SO<sub>x</sub>, and HAP were not supplied by the vendor. Therefore, the emission factors used in the analysis of PM<sub>10</sub>, SO<sub>x</sub>, HAP were obtained from the Environmental Protection Agency (EPA) document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, Section 3.1 *Stationary Gas Turbines* (4/00). Potential emissions of the application represent the potential of the new equipment, based on the maximum hourly design rate and assuming continuous operation (8760 hours per year).

Existing potential emissions and existing actual emissions were determined from the 2000 Emissions Inventory Questionnaire (EIQ). The following table provides an emissions summary for this project.

Table 1: Emissions Summary (tons per year)

Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Potential Emissions	Existing Actual Emissions (2000 EIQ)	Potential Emissions of the Application	New Installation Conditioned Potential
PM <sub>10</sub>	15.0	173.95	1.62	3.40	N/A
SO <sub>x</sub>	40.0	158.51	1.47	1.75	N/A
NO <sub>x</sub>	40.0	3701.10	33.66	53.15	40.0
VOC	40.0	249.73	2.29	18.53	N/A
CO	100.0	699.91	6.40	64.69	N/A
HAPs	10.0/25.0	N/D	N/D	0.53	N/A

\*N/A = Not Applicable; N/D = Not Determined

## PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of NO<sub>x</sub> are conditioned to de minimis levels.

## APPLICABLE REQUIREMENTS

### I. MMU-NEMO Generating Station

#### A. General

1. *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110
  - a) Emission Limitation: \$25.70 per ton of pollutant or the amount established by the Missouri Air Conservation Commission under

- Missouri Air Law 643.079(1) if changed.
- b) Record Keeping Requirement: Emission Inventory Questionnaire (EIQ).
- c) Monitoring Requirement: None
- d) Reporting Requirement: April 1 for previous year's emissions (EIQ).

2. *Operating Permits*, 10 CSR 10-6.065

- a) Emission Limitation: As required by 10 CSR 10-6.065, *Operating Permits*.
- b) Record Keeping Requirement: As required by 10 CSR 10-6.065, *Operating Permits*.
- c) Monitoring Requirement: As required by 10 CSR 10-6.065, *Operating Permits*.
- d) Reporting Requirement: Revision to Part 70 Operating Permit within 12 months of equipment start-up.

B. Odors

1. *Restriction of Emission of Odors*, 10 CSR 10-3.090

- a) Emission Limitation: No person may cause, permit or allow the emission of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one (1) volume of odorous air is diluted with seven (7) volumes of odor-free air for two (2) separate trials not less than 15 minutes apart within the period of one (1) hour.
- b) Record Keeping Requirement: None
- c) Monitoring Requirement: None
- d) Reporting Requirement: None

C. Fugitive Particulate Matter

1. *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*, 10 CSR 10-6.170

- a) Emission Limitation: No person may cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter to go beyond the premises of origin in quantities that the particulate matter:
  - (1) Remains visible in the ambient air beyond the property line of origin;
  - (2) Or, may be found on surfaces beyond the property line of origin.

The nature or origin of the particulate matter shall be determined by microscopy or other technique proven to be equally accurate and approved by the Director.

- b) Record Keeping Requirement: Department of Natural Resources' inspection reports.
- c) Monitoring Requirement: Periodic Department of Natural Resources' inspection/routine surveillance.
- d) Reporting Requirement: None

D. Visible Air Contaminants

- 1. *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.220
  - a) Emission Limitation: MMU-NEMO Generating Station shall not discharge into the ambient air from any single existing source of emission whatsoever any air contaminant of an opacity greater than twenty percent (20%).
  - b) Record Keeping Requirement: As required by 10 CSR 10-6.065, *Operating Permits*.
  - c) Monitoring Requirement: As required by 10 CSR 10-6.065, *Operating Permits*.
  - d) Reporting Requirement: MMU-NEMO Generating Station shall report to the APCP Enforcement Section, P.O. Box 176, Jefferson City, Missouri 65102, no later than ten (10) days after any exceedance of the opacity limit, established by 10 CSR 10-6.220 and 10 CSR 10-6.065, or any malfunction which could possibly cause an opacity exceedance.

II. Solar Mars 100 Combustion Turbine

A. Sulfur Dioxide (SO<sub>2</sub>)

- 1. *New Source Performance Regulations*, 10 CSR 10-6.070
  - a) Emission Limitation: No owner or operator shall cause to be discharged into the atmosphere from any stationary gas turbine any gases which contain sulfur dioxide in excess of 0.015 percent by volume at 15 percent oxygen and on a dry basis. [40 CFR §60.333(a)]
  - b) Fuel Limitation: No owner or operator shall burn in any stationary gas turbine any fuel which contains sulfur in excess of 0.8 percent by weight [40 CFR 60.333(b)]
  - c) Testing Requirement: As specified in 40 CFR §60.8 and §60.335
  - d) Monitoring Requirement: As specified in 40 CFR §60.334 or alternative monitoring schedule as proposed by the permittee and approved by the Director
  - e) Reporting Requirement: As specified in 40 CFR §60.334

B. Nitrogen Oxides (NO<sub>x</sub>)

- 1. *New Source Performance Regulations*, 10 CSR 10-6.070
  - a) Emission Limitation: No owner or operator shall cause to be discharged into the atmosphere from any stationary gas turbine any gases which contain nitrogen oxides in excess of 0.011 percent by volume at 15% oxygen and on a dry basis. [40 CFR § 60.332]
  - b) Testing Requirement: As specified in 40 CFR §60.8 and §60.335
  - c) Monitoring Requirement: As specified in 40 CFR §60.334

- d) Reporting Requirement: As specified in 40 CFR §60.334

#### AMBIENT AIR QUALITY IMPACT ANALYSIS

Although PM<sub>10</sub> emissions were below de minimis levels, ambient air quality modeling was performed to determine the impact of PM<sub>10</sub> emissions. Recently, a permit was issued to Northeast Missouri Grain for modification to their ethanol plant. Issues with their PM<sub>10</sub> air quality analysis required refined modeling to demonstrate compliance. Due to the close proximity of the new power plant, modeling analysis was completed for Macon Power Plant to determine the impact of the gas turbine. The following table lists the modeled impact and the National Ambient Air Quality Standard (NAAQS) for PM<sub>10</sub> in units of micrograms per cubic meter (µg/m<sup>3</sup>).

Pollutant	Modeled Impact	NAAQS	Time Period
PM <sub>10</sub>	2.1056	150	24-Hour
	0.0644	50	Annual

According to the modeled impact, Macon Power Plant will be in compliance with the NAAQS.

#### STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, I recommend this permit be granted with special conditions.

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Emily Enkvetchakul  
Environmental Engineer

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Date

#### PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form dated February 12, 2002, received February 21, 2002, designating Macon Power Plant-City of Macon as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.
- Northeast Regional Office Site Survey dated April 5, 2002.
- Predicted Engine Performance data submitted with application as supplied by Solar Turbines.

## Attachment A – Monthly NO<sub>x</sub> Compliance Worksheet

MMU-NEMO Generating Station  
Macon County, S17, T57N, R13W  
Project Number: 2002-03-015  
Installation ID Number: 121-0004  
Permit Number:

This sheet covers the period from \_\_\_\_\_ to \_\_\_\_\_.  
(month, year) (month, year)

Date	Hours of Operation (hours)	Emission Rate (lbs/hr) (Note 1)	NO <sub>x</sub> Emissions (Ton) (Note 2)
Total NO <sub>x</sub> Emissions for this Month (Note 3)			
12-Month NO <sub>x</sub> Emissions Total From Previous Month's Worksheet (Note 4)			
Monthly NO <sub>x</sub> Emissions Total From Previous Year's Worksheet (Note 5)			
Current 12-Month Total NO <sub>x</sub> Emissions (Note 6)			

Note 1: Emission rate determined from stack emissions data.

Note 2: Monthly NO<sub>x</sub> emissions will be based upon stack emissions data.

$$\text{NO}_x \text{ Emissions} = [(\text{hours of operation}) \cdot (\text{emission rate})] / 2000$$

Note 3: Sum of NO<sub>x</sub> emissions reported for the combustion turbine for the month.

Note 4: Running 12-month total NO<sub>x</sub> emissions from the previous month's worksheet.

Note 5: NO<sub>x</sub> emissions reported for this month in the last calendar year.

Note 6: Amount reported for Note 4 minus the amount reported for note 5 plus the amount reported for note 3, not to exceed 40.0 tons for any consecutive 12-month period.



Mr. Scott Lucas  
Energy Resources Manager  
Macon Power Plant-City of Macon  
404 Vine Street  
P.O. Box 569  
Macon, Missouri 63552-0569

RE: New Source Review Permit - Project Number: 2002-03-015

Dear Mr. Lucas:

Enclosed with this letter is your permit to construct. Please study it carefully. Also, note the special conditions, if any, on the accompanying pages. The document entitled, "Review of Application for Authority to Construct," is part of the permit and should be kept with this permit in your files.

Operation in accordance with these conditions, your new source review permit application and with your amended operating permit is necessary for continued compliance. Please check your operating permit as it will contain all applicable requirements for your installation, including any special conditions from this permit to construct.

The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

If you have any questions regarding this permit, please do not hesitate to contact me at (573) 751-4817, or you may write to me at the Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, Missouri 65102.

Thank you,

AIR POLLUTION CONTROL PROGRAM

Kyra L. Moore  
Interim New Source Review Unit Chief

KLM:eed

Enclosures

c: Northeast Regional Office  
PAMS File 2002-03-015

Permit Number:

STATE OF MISSOURI      Bob Holden, Governor • Stephen M. Mahfood, Director  
**DEPARTMENT OF NATURAL RESOURCES**

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[www.dnr.state.mo.us](http://www.dnr.state.mo.us)

November 22, 2002

Mr. Kevin Lyda  
Supervisor Energy Resources Generation  
Macon Municipal Power Plant  
P.O. Box 569  
Macon, MO 63552

RE: Air Operating Permit Part 70 Application Renewal  
Installation ID: 121-0004

Dear Mr. Lyda:

On November 18, 2002, we received your Part 70 permit application renewal. Your Project No. is 2002-11-179. Slawomir Szydlo will be reviewing your application.

If you have any questions or need additional information, please contact Slawomir Szydlo with the Air Pollution Control Program at P.O. Box 176, Jefferson City, MO 65102 or by phone at (573) 751-4817.

Thank you,

AIR POLLUTION CONTROL PROGRAM  
Permits Section Clerical AP

c: PAMS File: 2002-11-179

*Integrity and excellence in all we do*



The APCP has also determined that using less than 0.5 percent by weight of sulfur in the fuel, should be sufficient to demonstrate compliance with the SO<sub>2</sub> ambient air quality standards of 10 CSR 10-6.010, therefore a SCREEN air dispersion model analysis was not conducted.

**Fugitive Emissions: Permit Condition PW001**

10 CSR 10-6.170, *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*

The regulation applies to fugitive particulate emissions, with the intent of restricting and preventing fugitive emissions from traveling off property. There are no fugitive emission sources of particulate matter that have been designated for this installation. However, the installation will be required to inspect its premises when and if construction or demolition is occurring on site.

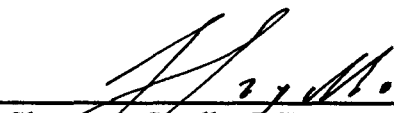
**Other Regulations Not Cited in the Operating Permit or the Above Statement of Basis**

Any regulation which is not specifically listed in either the Operating Permit or in the above Statement of Basis does not appear, based on this review, to be an applicable requirement for this installation for one or more of the following reasons:

1. The specific pollutant regulated by that rule is not emitted by the installation;
2. The installation is not in the source category regulated by that rule;
3. The installation is not in the county or specific area that is regulated under the authority of that rule;
4. The installation does not contain the type of emission unit which is regulated by that rule;
5. The rule is only for administrative purposes.

Should a later determination conclude that the installation is subject to one or more of the regulations cited in this Statement of Basis or other regulations which were not cited, the installation shall determine and demonstrate, to the APCP's satisfaction, the installation's compliance with that regulation(s). If the installation is not in compliance with a regulation which was not previously cited, the installation shall submit to the APCP a schedule for achieving compliance for that regulation(s).

Prepared by:

  
\_\_\_\_\_  
Slawomir Szydlowski, P.E.  
Environmental Engineer